

ORIGINAL RESEARCH ARTICLE

The institutionalization of health economics within the Ministry of Health in Brazil: A 2003–2023 analysis

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Abstract

Health economics has established itself as a strategic function in the Brazilian National Health System (SUS), contributing to greater equity, transparency, and efficiency in the allocation of public resources. This study analyzes the institutional trajectory of the Department of Health Economics and Development (DESID) of the Ministry of Health from 2003 to 2023, highlighting its key milestones, strategic axes, and persistent challenges. The research, from a historical–social perspective, was based on a documentary and content analysis of 126 official records available in the Virtual Health Library (VHL)–Health Economics section and in DESID's institutional collection, covering the period from 1988 to 2024. The results show that the department's

activities were structured around three central axes: management tools, monitoring and evaluation, and transparency and equity. These were operationalized in seven dimensions: financing regulation; management tools development; technical standardization and decentralization; budgetary control and efficiency; economic and technological evaluation; information production; and accountability and social control. Over two decades, DESID has promoted systems such as the Public Health Budget Information System and the Health Price Bank, produced manuals, glossaries, and bulletins, and strengthened fiscal transparency and evidence-based decision-making. However, major gaps remain, including the absence of systematic impact assessments, weak economic regulation of the private sector, and limited focus on vulnerable populations. It is concluded that, despite advances in institutionalizing health economics as a strategic technical area in the SUS, there remains an urgent need for a national health economics policy to ensure equity, sustainability, and efficiency in public health financing in Brazil.

Keywords: Health economics; Brazilian National Health System; Public funding; Transparency; Governance; Brazil

1. Introduction

Health economics is a crucial field for enhancing the equitable allocation of resources and the financial management of health systems. Since the 1960s, studies in this field have explored the relationship between economic efficiency and access to health services, driving the adoption of analytical tools to optimize public financing (Arrow, 1963). In the 1980s, growing concern about the sustainability of health systems led to the expansion of the discipline in several countries, including Brazil, where the debate gained momentum in the context of health reform and the creation of the Brazilian National Health System (SUS) in 1988 (Mendes & Marques, 2006; Piola & Vianna, 1998).

The state reorganizations that took place in the 1980s and 1990s, within the context of the neoliberal wave, were driven in Latin America by the so-called Washington Consensus and directly influenced the formulation of public policies, including those in the health sector. According to Almeida (1999), these reforms, guided by principles of efficiency and cost containment, reconfigured the State's functions, leading to decentralization and the search for new models of health management. In Brazil, the Federal Constitution of 1988 established the universal right to health and the creation of the SUS in the context of neoliberal reforms, straining the process and requiring the development of economic tools to ensure its financial sustainability and universality and equity in access to health services.

Health economics is a strategic field for the formulation, evaluation, and management of public health policies,

especially in universal systems such as the SUS. Over the last two decades, Brazil has sought to incorporate economic evaluation tools more systematically to efficiently allocate resources, aiming to ensure the sustainability of the system and equitable access to services.

Authors such as Folland *et al.* (2016) emphasize that health economics concerns how resources are allocated in the health sector, accounting for scarcity, efficiency, and collective choices. Drummond *et al.* (2015) emphasize that economic evaluation provides a rational basis for health decisions, allowing for the comparison of costs and benefits of different interventions, which is crucial in contexts of budgetary constraints.

Despite the growing importance of the area, the institutionalization of Health Economics in the SUS still faces structural, political, and technical challenges. It is therefore essential to analyze how the area has been structured, what advances and setbacks have occurred along the way, and what prospects lie ahead.

This article analyzes the evolution of Health Economics within the SUS between 2003 and 2023, identifying the main institutional milestones, advances, and challenges in its consolidation as a field supporting public health management.

The institutionalization of Health Economics in the SUS occurred gradually, driven by the actions of different political and academic actors. In 1989, the creation of the Brazilian Association of Health Economics marked a step forward in organizing the field, strengthening scientific production, and improving the formulation of economic

policy in the sector. The 1990s were therefore characterized by an expansion in the range of courses and research in this area, with particular emphasis on the work of the Institute of Applied Economic Research (IPEA), the Oswaldo Cruz Foundation, and the Federal Universities of Minas Gerais, Pernambuco, and Bahia, which contributed to the training of specialists in the sector.

The creation of the Department of Health Economics, at the time known by the acronym DES, within the Ministry of Health in 2003 represented a milestone in the institutionalization of the field, providing greater structure and capacity for formulating health policies aimed at regulating health financing (Vieira, 2016b). Since then, the Department of Health Economics and Development (DESID) has sought to play a strategic role in the financial governance of the SUS, working in areas such as financing, budget transparency, economic health technology assessment (HTA), and monitoring the prices of medicines and strategic supplies. Derived from this quest, DESID's institutional evolution reflects its efforts to address the challenges faced by Brazil and the SUS, particularly in achieving greater efficiency and equity in public health financing.

There are few systematic analyses of the trajectory of DESID and its impacts on the SUS. Among the few initiatives, one that stands out is the mapping carried out by the IPEA (IPEA, 2024), which included DESID in its overview of the country's health economy, though without a specific focus on the department's role. However, there is still no systematic analysis of DESID as a technical area of the Ministry of Health. This study seeks to fill this gap by analyzing the evolution of the department's participation and role in the SUS.

We analyzed the trajectory of the Department of Health Economics from 2003 to 2023, identifying its principal strategic axes, regulatory frameworks, and implications for the formulation of public policy actions. The research is based on a documentary analysis of 126 files from the department's official library, aimed at understanding the ruptures and continuities that have influenced the current configuration of health economics in the SUS.

2. Data and methods

This historical-social perspective study investigates the trajectory of the DESID through documentary and content analysis, highlighting management and governance actions from 2003 to 2023. To understand the context in which the department was created, texts and documents published in the 1980s and 1990s were also used.

The collection and selection of official documents was

carried out at the Virtual Health Library (VHL)–Health Economics section, a specialized database endorsed by the Ministry of Health. This Virtual Health Library comprises documents considered strategic for consolidating the field and is used as an official source by the Department of Health Economics itself. The final corpus analyzed, covering the period from 1988 to 2024, consists of 126 documents identified as fundamental to DESID's institutional trajectory. In addition to the documents available in the department's virtual library, this study also included normative and technical-institutional materials produced and used by DESID.

The analysis of the documents was conducted through content analysis, a systematic method for identifying patterns and recurring themes in institutional discourse (Bardin, 2016). The analytical process followed a thematic categorization, allowing the identification of the principal strategic axes of DESID's activities.

In addition, a systematic cataloging of documents was conducted, enabling the temporal mapping of health economy policies and initiatives within the Ministry of Health. The document and content analysis were structured through this cataloging, which details the central characteristics of each document, facilitating the identification of patterns and recurrences. The cataloging process was organized in a matrix containing information on 126 papers, distributed across the following categories: document type, document typology, year of publication, title, description, observations, and number of pages. This systematization provided a comprehensive overview of the documentary dynamics related to the topic studied.

3. Results

Cataloging and content analysis were based on the assumptions of Bardin (2016) and Bowen (2009) to investigate library documents. These processes resulted in the classification of documents into six main types—judgment, legislation, spreadsheet, system, bibliographic production, and other publications—and 20 specific types—decision by a control body, federal constitution, decree, amendment, laws, ordinance, resolution, spreadsheet, system, article, bulletin, booklet, scientific production catalog, thematic glossary, technical guide, book, manual, report, document, and home page. Analysis of these documents revealed the institutional purpose of legitimizing a new area within the Ministry of Health, specifically DESID.

Since the late 1980s, actors from the Ministry of Health had been approaching concepts of health economics. In 1987, the Pan American Health Organization, in

partnership with the World Bank's Institute for Economic Development, held the first course on health financing in Latin America, aiming to introduce economic concepts applied to health, drawing on the experiences of countries in the region. The course took place in Brasilia and was intended for senior officials from the ministries of health, planning, finance, and social security across five countries: Brazil, Argentina, Colombia, Ecuador, and Uruguay (Pan American Health Organization, 1987).

At that time, studies by the Pan American Health Organization and the United Nations Children's Fund warned of the potential impact of declining employment and reduced government spending on health care on infant mortality and other indicators. The course also covered basic concepts in financial resource management, medical technology assessment, financial equity, and the effectiveness of health care service delivery, among other topics. The need for national studies on health financing, economic adjustment, and the procurement of medicines was also evident (Pan American Health Organization, 1987).

With the enactment of the Federal Constitution of 1988 and the consequent creation of the SUS, it became necessary to establish regulatory and financial instruments that would enable its effective implementation. In this context, the Basic Operational Standards (NOBs) played a crucial role in consolidating the administrative and financial decentralization of the system. NOB 01/1991 marked the beginning of financial transfers from the federal level, still under strong centralized control (Brazil, 1991). Subsequently, NOB 01/1993 introduced the mechanism of regular, automatic transfers in the fund-to-fund modality, in addition to establishing the Tripartite Interagency Committees and Bipartite Interagency Committees, which are fundamental for coordination and agreement among federal entities (Brazil, 1993). Finally, NOB 01/1996 consolidated the process of full municipalization of health management, giving municipalities responsibility for primary care and stating the role of regional coordination of health actions and services (Brazil, 1996).

In 1994, the 1st National Conference on Science and Technology in Health (Brasil, 1994) was held, which recognized the need for a coordinating system to link the SUS and the national science and technology (S&T) system, proposing the creation of a national secretariat with technical capacity, federal coordination, and social control. In 2003, the creation of the Department of Health Economics within the Secretariat of Science, Technology, and Strategic Inputs of the Ministry of Health was a direct result of this conference's deliberations. It can be said that this institutionalization responded to concerns

about the risks of unsustainable cost increases in the SUS and reflected the efforts of the health movement, which, since the 1970s, had advocated for an equitable, integrated, and evidence-based public health policy, even amid the impacts of neoliberal reforms and the global restructuring of social policies.

After the creation of the SUS, the greatest challenge for its management was the implementation of control mechanisms to ensure the equitable distribution of financial resources and their efficient application, in accordance with Law No. 8.080/90, which organizes services for the promotion, protection, and recovery of health, to guarantee the constitutional right to universal and free health care (Brazil, 1990).

In 1995, IPEA published the book *Health Economics: Concept and Contribution to Health Management* (Piola & Vianna, 1998), which is considered the first work on the term "health economics for management" published in Portuguese. In it, Del Nero (1995) defined health economics as "the branch of knowledge that aims to optimize health actions, that is, the study of the optimal conditions for distributing available resources to ensure the best possible health care and health status for the population, taking into account limited means and resources" (Del Nero, 1995, p. 20). This contribution has been fundamental for future studies within the SUS since its creation in 1988. It was based on the concept of a permanent struggle between scarce financial resources and growing health demands.

The Department of Health Economics was therefore created in June 2003 within the context of the newly created Secretariat of Science, Technology, and Strategic Inputs (Brasil, 2003), as shown in Figure 1, which meant ensuring "more definitive contours for the field of health economics in Brazil" (Vieira, 2016b, p. 312). In its early years, the department focused its efforts on three key areas: efficiency, transparency, and equity in the management of resources for the SUS, established in the 1988 Constitution, which, in subsequent years, required the regulatory and financial regulation of a national health policy between the federal government and subnational entities.

Concrete examples of actions in this direction include initiatives such as the regulation of the Public Health Budget Information System (SIOPS), which consolidates data on revenues and expenditures related to public health actions and services, ensuring compliance with constitutional minimums for states, municipalities, and the federal government in the area of health, and the Health Price Bank (BPS), which provides transparency in the purchase of medicines and health supplies. Various rulings by the Federal Court of Accounts (TCU) reinforce these initiatives by guiding the monitoring of the different

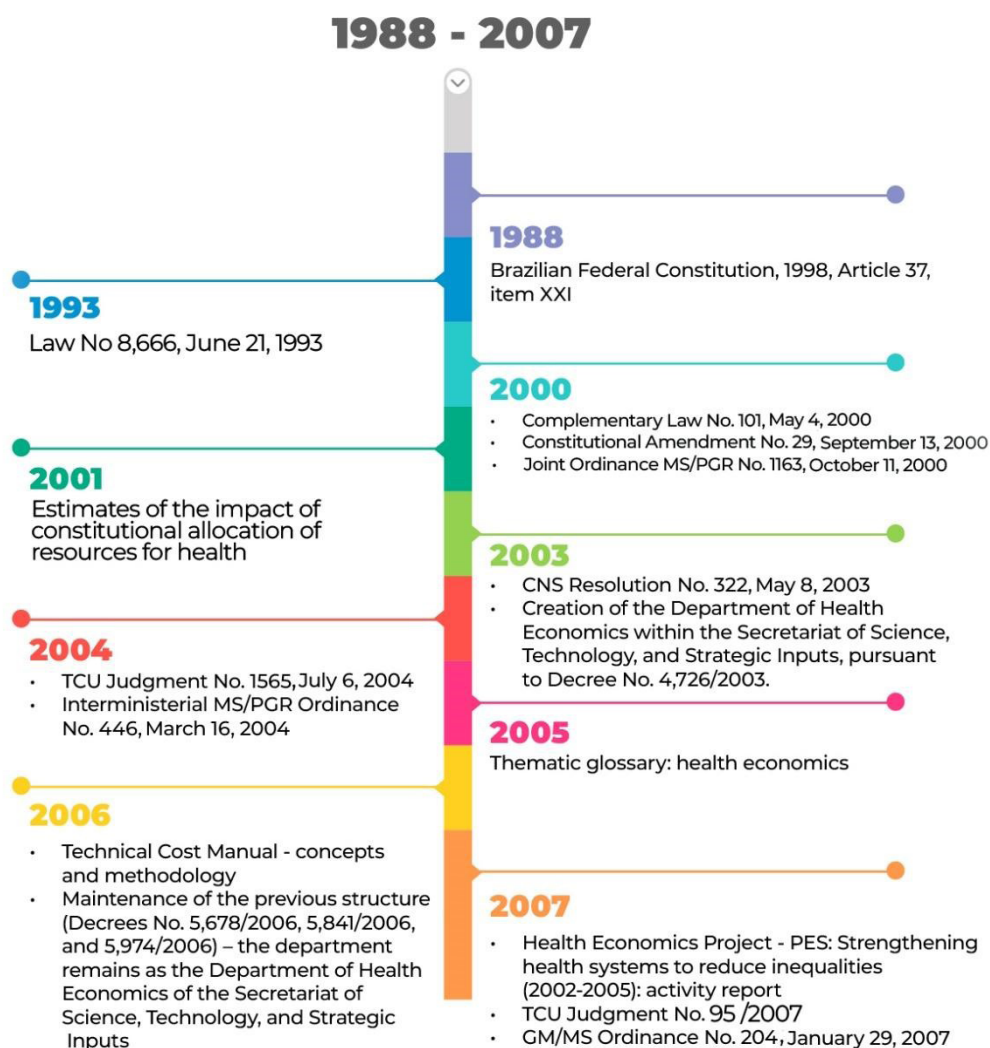


Figure 1. Documents analyzed from 1988 to 2007. The figure was created by the authors using Adobe Photoshop (version 22.0.0).

Abbreviations: CNS: National Health Council; MS/PGR: Ministry of Health/Attorney General's Office.; PES: Health Economics Project; PGR: Prosecutor General of the Republic; TCU: Federal Court of Accounts.

control bodies about the need for transparency and greater clarity in the allocation of resources.

In turn, beyond these initiatives, management and efficiency were themes that emerged as central aspects of health economics, represented in the area's implementation documents, such as the Technical Cost Manual (Brasil, 2006), which introduced the National Cost Management Program, and established concepts and methodologies for calculating costs, in addition to highlighting the benefits of its management for health institutions, which reinforces the institutional role of DESID as a technical and coordinating area of the SUS at the central level.

After three years of initial institutionalization of the department, its governmental agenda began to incorporate new topics, including economic and technological analyses to support the formulation of public health policies. Among the publications that mark this thematic expansion, the following stand out: Economic Evaluation in Health (Brasil, 2008) and Health Technology Assessment (Brasil, 2009a). Although the latter is under the responsibility of the Department of Science and Technology, linked to the Secretariat of Science, Technology, and Strategic Inputs, its publication is part of the collection organized by the Executive Secretariat under the *Series A. Technical*

Standards and Manuals, in which DESID participated through the health economics and development area. These publications highlight the department's concern with adopting technical tools to inform decisions and promote evidence-based management within the SUS.

In 2009, the Department of Health Economics became part of the Executive Secretariat of the Ministry of

Health, changing its name to the DESID (Brasil, 2009b) (Figure 2). That same year, the department published the *Thematic Glossary of Health Economics* (Brasil, 2009c), which standardized concepts and aimed to improve communication in health economics, reinforcing the importance of conceptual harmonization and training among those involved in policy-making.

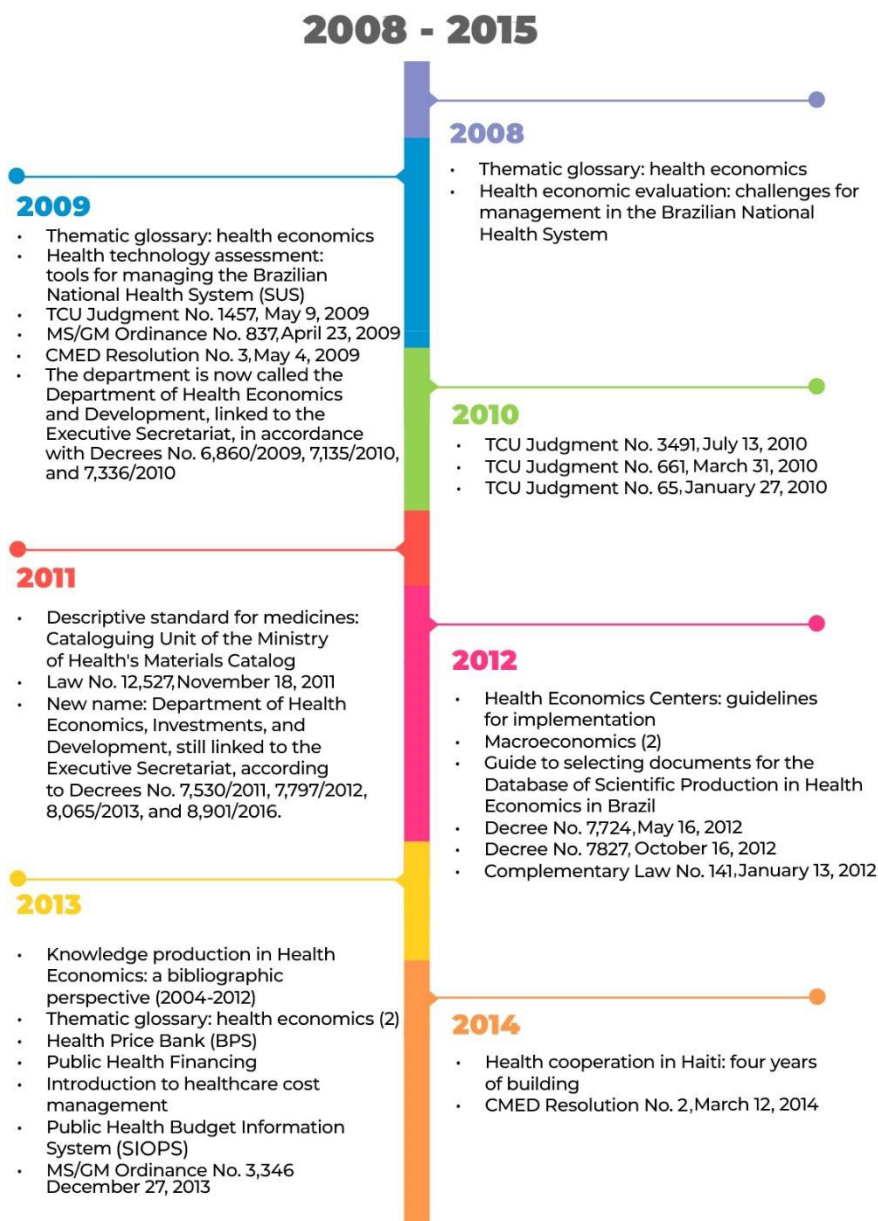


Figure 2. Department of Health Economics and Development documents from 2008 to 2015. The figure was created by the authors using Adobe Photoshop (version 22.0.0).

Abbreviations: CMED: Chamber for Drug Market Regulation; MS/GM – Ministry of Health, Minister's Office; TCU: Federal Court of Accounts.

In July 2011, still linked to the Executive Secretariat, the Department of Health Economics changed its name again, becoming the Department of Health Economics, Investments, and Development (Brasil, 2011). This name remained until June 2022, when it was replaced by the Department of Health Economics, Investment, and Performance (Brasil, 2022).

Between 2011 and 2021, the department published 40 documents related to the formulation and implementation of public health policies. These materials cover topics ranging from analyses of underfunding and inefficiencies in resource allocation to proposals focused on management and sustainability, demonstrating the agency's concern with providing practical and regulatory tools to strengthen the SUS.

Publications such as *Public Health Financing* (Brasil, 2013) and *Tools for Diagnosing and Qualifying Health Investments* (Brasil, 2015a) offer data and in-depth analysis on regional inequalities and budgetary challenges in Brazil, highlighting the chronic underfunding of health and the need for more efficient and effective policies to reduce disparities and optimize the use of public resources. Theoretical and conceptual works, such as *Microeconomics* (Brasil, 2012b) and *Macroeconomics* (Brasil, 2012a), introduce fundamental concepts applied to health economics, providing support for managers and researchers.

It should be noted that since the department's creation in 2003, management tools have played a central role in the debate on health economics. The BPS and the SIOPS, regulated in 2013, have established themselves as pillars of transparency and control. The BPS, regulated by TCU Ruling No. 3491/2010, has been essential for monitoring the compliance of health departments, while SIOPS facilitates budgetary assessment and improves accountability in public management (Ministry of Health, 2013).

Another significant milestone during this period was Law No. 12,527/2011, which regulates access to information as provided for in the Federal Constitution, improving transparency and social control of the SUS. This legislation strengthened social control and imposed on public managers the obligation to make data available in a clear and accessible manner. In line with this movement and under the guidance of DESID, the Ministry of Health published the *Manual of Descriptive Standards for Medicines* in 2011 (Ministry of Health, 2011). This initiative aimed to standardize the nomenclature of medicines purchased by the SUS, thereby promoting greater efficiency, transparency, and competitiveness in public procurement processes, and facilitating the traceability and monitoring of government purchases.

Sustainability in health infrastructure was also added to the department's agenda. The work *Qualification and Sustainability of Health care Facility Construction* (Brasil, 2015b) addresses the application of bioclimatic principles and environmental certifications to reduce ecological impacts in hospital construction.

The decentralization of health economics in the SUS was addressed in the publication *Health Economics Centers: History and Bibliographic Production* (Brasil, 2016), which highlights the role of regional centers in disseminating knowledge in this area. At the same time, thematic glossaries published by the department contributed to conceptual standardization and the training of public managers.

In 2021, the department published a series of newsletters based on data from SIOPS and BPS, increasing transparency and public oversight of the management of public health resources. These publications facilitated budget execution monitoring, enabling the identification of financial bottlenecks and supporting real-time evaluation of public policies, thereby promoting greater accountability and efficiency in resource use, as shown in Figure 3.

In 2022, the DESID produced a range of materials, including one document, one special edition journal containing 14 articles, two newsletters, one book, one manual, and one updated glossary. One of the highlights of this period was the *Health Economy Bulletin* (2022), which discussed the financial sustainability of the SUS and introduced tools such as the National Cost Management Program and the SUS Cost Calculation and Management System, both essential for decisions based on operational data.

The special edition of the *Brazilian Journal of Health Economics*, published in February 2022, was the result of a partnership between the Ministry of Health and the World Bank, focusing on the theme "Sustainability and Efficiency of the Brazilian Health System." The publication brought together original, institutional, and opinion articles that address challenges and propose ways to strengthen the SUS in the post-COVID-19 scenario, with an emphasis on improving the quality of public spending, adopting technologies, and implementing efficiency strategies. This was an essential initiative by DESID to promote technical and scientific debate on evidence-based public health policies.

In addition, the 2022 publication *Health Accounts from an International Accounting Perspective: The SHA Account for Brazil, 2015 to 2019* analyzed public health spending in the country, emphasizing the need for greater investment and equitable distribution of resources, in line

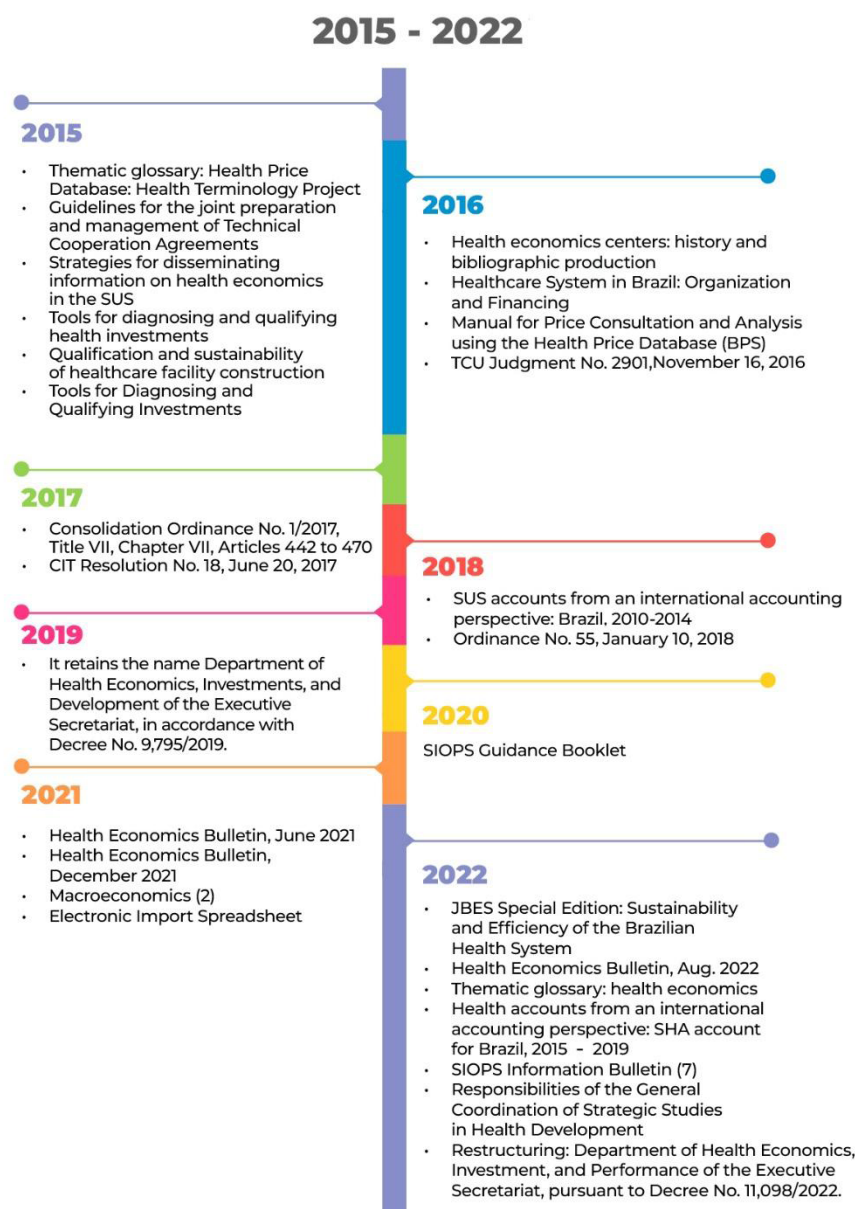


Figure 3. Department of Health Economics and Development documents from 2015 to 2022. The figure was created using Adobe Photoshop (version 22.0.0).

Abbreviations: CIT: Tripartite Intergovernmental Commission; JBES: Brazilian Journal of Health Economics; SIOPS: Public Health Budget Information System; SUS: Brazilian National Health System; TCU: Federal Court of Accounts.

with international best practices. Other publications, such as the new BPS manuals and SIOPS newsletters, reinforced the importance of efficient fiscal governance and warned of the consequences of non-compliance with constitutional obligations, such as the application of the constitutional minimum for health.

In the same year, the *Thematic Glossary of Health*

Economics (Brasil, 2022) was updated, contributing to conceptual standardization and improved technical communication among SUS managers. These studies highlighted ways to align the Brazilian health care system with global health economics practices, focusing on financial sustainability, social inclusion, and efficient resource use.

Twenty years after its creation, having operated for most of that time within the Executive Secretariat, the department returned to the Secretariat of Science, Technology, and Innovation and the Economic–Industrial Health Complex of the Ministry of Health, renamed as the DESID (Decree No. 11,358, dated January 1, 2023: Approves the Regulatory Structure and the Table of Commissioned Positions and Positions of Trust of the Ministry of Health and reassigns commissioned positions and positions of trust, 2023). In this new context, DESID assumed a political and institutional role in developing public policies aligned with a new strategic vision for health economics in Brazil. This approach addressed the demand for health supplies, a vulnerability exposed

during the pandemic period, and reflected changes in the department's positioning within the political arena. This year, nine documents were published in the department's official library, as summarized in Figure 4, highlighting DESID's main publications between 2023 and 2024.

Following DESID's return to the Secretariat of Science, Technology, and Innovation and the Economic–Industrial Health Complex, an initiative was launched to address the urgent need for a National Health Economics Policy. This policy was based primarily on an ex-ante analysis, commissioned by the department, which substantiates the need for such a policy and strengthens the field of health economics in Brazil. It was agreed upon in 2023 through a decentralized execution term with the Federal

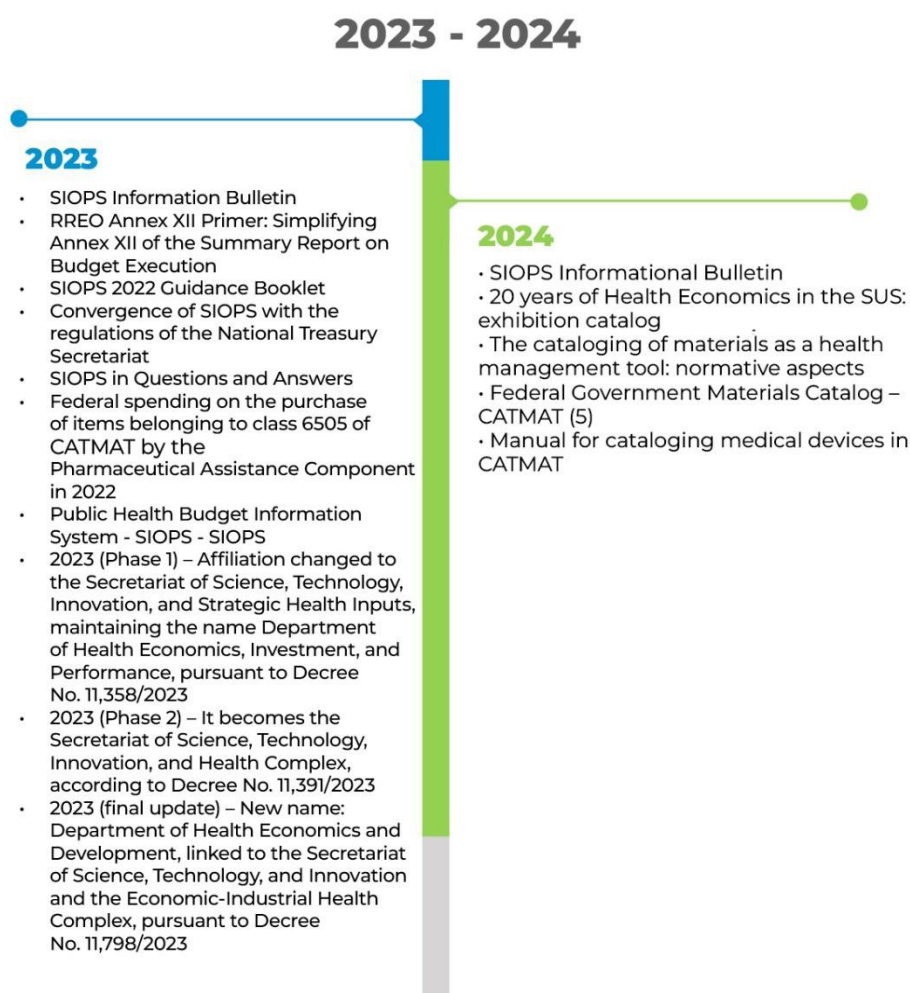


Figure 4. Department of Health Economics and Development documents from 2023 to 2024. The figure was created using Adobe Photoshop (version 22.0.0).

Abbreviations: CMAT: Materials Catalog; SIOPS: Public Health Budget Information System; SUS: Brazilian National Health System.

University of Rio Grande do Norte, which was carried out by researchers from the Laboratory for Technological Innovation in Health.

The newsletters of the SIOPS and other documents explore the technical convergence between the system and the regulations of the National Treasury Secretariat, providing support to increase transparency and effectiveness in public accountability. The book *SIOPS in Questions and Answers* (Brasil, 2023) complements this approach by providing direct, accessible explanations of the management and monitoring of health resources. In 2023, further specific publications, such as the report on federal spending on drugs in *Materials Catalog Class 6505* (Ministry of Health & The Pan American Health Organization, 2023).

4. Discussion

An analysis of the DESID's trajectory over the past two decades revealed a significant effort to establish institutional and political structures for health economics within the Ministry of Health. Initially focused on structural issues—such as financing, transparency, and control—DESID's work reflected the typical challenges of the SUS institutionalization process, especially concerning the equitable distribution of resources and the consolidation of decentralized public management.

While HTA has become a central component of evidence-informed decision-making within the SUS, it is important to situate its institutional governance accurately within the Ministry of Health. The formal responsibility for conducting HTA and assessing the incorporation of technologies lies with the Department of Management and Incorporation of Health Technologies, rather than with the DESID. DESID's contribution to this field has historically been indirect but strategic, by strengthening economic rationality, financial governance, and analytical instruments that support decision-making processes across the health system.

From this perspective, the department's role has been to create enabling institutional and economic conditions for HTA, rather than to evaluate the impacts of specific technologies. This distinction is essential to avoid attributing evaluative outcomes to institutional mandates that exceed the scope of DESID's functions and to preserve analytical coherence in interpreting the department's historical trajectory.

In this context, the institutional strengthening of health economics responded to the growing demand for efficiency in the use of public resources, especially in view of the underfunding of the SUS, which later became

chronic due to the fiscal pressures faced by the Brazilian State. With these governing forces, the department's initial actions therefore represent not only a technical response to a budgetary problem, but also the actions of political entrepreneurs who managed to articulate technical solutions and political alignment to place the issue on the decision-making agenda (Capella, 2016).

Over the past 20 years, DESID has played a key role in developing tools, drafting regulations, and providing information to improve the management of the SUS. Based on an analysis of published documents, it can be observed that the history of health economics in the SUS, led by the department, has been anchored in three main areas: (i) management tools, (ii) monitoring and evaluation, and (iii) transparency and equity; and in seven dimensions: (i) institutional structuring and financing regulations; (ii) development of management tools; (iii) technical standardization and decentralization of management; (iv) budgetary control and efficiency in resource allocation; (v) economic and technological evaluation; (vi) production of qualified information; and (vii) accountability and social control. This journey can be viewed as an integrated whole in Figure 5, which summarizes DESID's historical trajectory in health economics within the SUS.

This configuration highlights a continuous effort toward technical rationalization and institutional consolidation of Health Economics as a strategic area within the SUS, capable of influencing other areas to orchestrate other policies. Despite the diversity of topics, the analysis also identified gaps in the department's agenda. For instance, little has been observed regarding the impact assessment of implemented public policies, making it challenging to measure the actual effects of proposed initiatives on public spending efficiency and health outcomes. This gap has been overcome with training in the area funded by DESID through the Institute of Collective Health at the Federal University of Bahia.

Similarly, issues related to the economic regulation of the private sector, the judicialization of health, and the financing of vulnerable populations—such as indigenous peoples and Quilombolas—appear only marginally or not at all, requiring analysis grounded in the context of public policies (Oliveira, 2016). It should be noted that although the production of high-quality information is a noteworthy dimension, it has not been accompanied by concrete guidelines to reduce regional inequalities in access to health care, nor by redistributive mechanisms capable of addressing the structural imbalances in the system. These omissions reveal a thematic selectivity that limits the agenda's potential to address the most complex challenges facing Brazilian public health, especially concerning equity



Figure 5. Historical trajectory of the Department of Health Economics and Development (DESID) in the Brazilian National Health System's health economy. The figure was created using Adobe Photoshop (version 22.0.0).

and distributive justice in health (Winckler *et al.*, 2022).

In its first year of operation (2003–2004), the Department of Health Economics was strongly guided by the need for institutional structuring and financing regulations, which are essential elements for consolidating the SUS as a universal public policy. In line with the focus on management tools, this initial phase reveals an attempt to establish the regulatory and operational foundations for the decentralization of federal resources, as evidenced by the National Health Council Resolution No. 322/2003 and the Ministry of Health/Attorney General's Office (MS/PGR) Ordinance No. 446/2004.

The prioritization of this dimension reflects the post-health reformation and the emergence of demands for

mechanisms that would enable federal management with greater equity and efficiency (Brasil, 2011). The inclusion of these issues on the department's agenda, therefore, did not occur neutrally but reflected a deliberate process of strengthening the state apparatus focused on the financial governance of public health (Lopez *et al.*, 2018).

After the enactment of the Federal Constitution of 1988, which enshrined health as a right for all and a duty of the State, implementing this policy required a complex federal arrangement to enable the transfer of resources and the operationalization of the SUS at the state and municipal levels. The decentralization of management, although essential to the principle of equity, has brought new challenges in oversight and the efficient use of public funds, especially amid the growing demand for

accountability and fiscal rationality.

Between 2005 and 2007, DESID decisively structured itself around the axis of transparency and equity, with a specific focus on strengthening accountability and social control. The creation and improvement of the BPS as a tool to enable greater visibility and standardization of prices charged for the purchase of health supplies. This agenda reflects both social pressure for greater transparency and the technocratic logic of improving public management tools.

The inclusion of this issue on the decision-making agenda was also favored by a political environment sensitive to the implementation of control mechanisms, especially in view of the advance of fiscal decentralization and the actions of external control bodies, such as the TCU. Thus, the prioritization of this dimension in the department's agenda, although technical in appearance, is deeply intertwined with political disputes over the definition of governance standards within the SUS and across different political arenas (Côrtes, 2009).

The SIOPS, as a strategic fiscal monitoring tool, reveals the centrality of transparency in DESID, especially amid growing pressure for accountability in public management. Although the system was created in 2000, it was not until 2009 that its use became more institutionalized as a structural part of the SUS financing policy, reflecting the actions of political and technical entrepreneurs in defending a culture of budgetary control (Capella, 2016).

This prioritization can be understood as the result of the convergence between problems, such as recurring questions about compliance with Constitutional Amendment No. 29/2000, and policies aimed at modernizing fiscal management. Compliance with the Fiscal Responsibility Law's requirements and the increasing role of external control bodies, such as the TCU, reinforced the inclusion of this topic on the department's agenda.

From 2009 to 2011, the department also began incorporating economic and technological assessment in a more structured manner, as part of the monitoring and assessment axis. The adoption of methodologies such as cost-effectiveness analyses and budget impact studies indicates an effort to base decisions on efficiency criteria, thereby rationalizing public health spending.

Although these tools have proven valuable for selecting technologies and setting priorities, their application has been concentrated in specific areas, without expanding systematically to other SUS policies and programs. This suggests that, although DESID has contributed to technically qualifying decision-making, the full institutionalization of economic evaluation—such as cost-

effectiveness, budget impact, and cost-benefit analyses—as a cross-cutting component of health policy still faces resistance and operational limitations, even though it is of paramount importance for ensuring evidence-based decisions, promoting greater rationality in resource allocation, and increasing the transparency and efficiency of public spending. Its systematic application enables the prioritization of technologies, programs, and investments that yield greater health returns for the population, particularly in contexts of budgetary constraints and growing regional inequalities.

Between 2012 and 2015, DESID remained aligned with the transparency and equity axis, with noticeable advances in strengthening accountability and social control. The incorporation of the Access to Information Act (Law No. 12,527/2011) as a regulatory framework mandated active disclosure of data, creating a window of opportunity for the department to strengthen its role in the production and dissemination of information on health spending.

The introduction of the theme of environmental sustainability in publications of the period, such as the work *Qualification and Sustainability of Health Care Facility Construction*, reveals a conceptual expansion of the agenda, connecting economic efficiency to social and environmental responsibility. Although innovative, this incorporation still appeared sporadic and was poorly integrated with other SUS planning and financing instruments.

This suggests an incipient attempt to diversify the issues under the department's responsibility, without necessarily having undergone an institutional redesign to systematically absorb these new challenges. Thus, the period analyzed marks essential advances in the quality of information and public access to data, but also highlights the structural and operational limitations of DESID in robustly incorporating more cross-cutting dimensions, such as sustainable development.

Between 2016 and 2020, DESID demonstrated continuity in prioritizing the management instrumentation axis, with an emphasis on technical standardization and management decentralization. The production of materials aimed at improving management tools revealed an attempt to strengthen the conceptual basis of health economics in the SUS, improving the instruments used for resource allocation and budget monitoring.

These efforts can be seen as a strategy for institutional reinforcement in a context of political instability and fiscal austerity, where standardization and technical qualification serve as mechanisms to defend public policy against defunding pressures (Vieira, 2016a). The

consolidation of technical standards during this period expanded the technical capacity of subnational entities. However, significant challenges remain regarding the equitable distribution of institutional capacities among municipalities and states (Gomide & Marengo, 2024).

From 2021 to 2023, DESID shifted its activities, placing greater emphasis on using data to inform decisions that promote transparency and equity in financing. The publication of updated bulletins, manuals, and systems reflects a movement toward the active dissemination of strategic information, expanding the department's reach beyond its technical function and seeking to directly influence the formulation and monitoring of public policies. The institutionalization of the health economics network, the evaluation of public policies, and the accounts and systems managed by DESID are examples of this shift, which began in 2023.

Despite the progress made, consolidating health economics as a strategic area supporting the management of the SUS remains a significant challenge. Among these, the scarcity of specialized human resources stands out, particularly at the subnational levels, which compromises the technical capacity to analyze and use the instruments developed by DESID. This is further exacerbated by the lack of a consolidated institutional culture that incorporates economic evidence into public policy formulation, hindering the systematic integration of cost-effectiveness and budgetary impact analyses into decision-making processes. Finally, difficulties persist in the coordination between the bodies responsible for economic assessment and those in charge of budget allocation, undermining the effectiveness of financial governance and limiting the area's potential to support more efficient and equitable decision-making.

To strengthen the health economy in the SUS, it is necessary to advance the institutionalization of an integrated national policy that values the continuing education of technical staff, consolidates collaborative economic analysis networks, and integrates with planning and budgeting systems. International experiences, such as the National Institute for Health and Care Excellence in the United Kingdom or the Canadian Agency for Drugs and Technologies in Health in Canada, demonstrate that robust economic evaluation structures, combined with transparent deliberation processes, contribute significantly to the sustainability of public systems. It is important to emphasize that partnerships created through international scientific cooperation, focused on the development of research and products, contribute to the promotion of public health policies, while enabling the exchange of knowledge, techniques, experiences, and technologies

essential for international cooperation among Brazilian higher education institutions (Lima *et al.*, 2024).

In this regard, DESID has presented initiatives such as the Health Economy and Development Network (Rede Ecos), which represent a strategic opportunity for disseminating and developing capacities. These initiatives should be accompanied by institutional mechanisms that guarantee their continuity, legitimacy, and influence in the public policy cycle. In addition to its essential role in managing systems that monitor health investments by each subnational entity, DESID also plays a role in areas with significant economic impact, such as calculating the minimum wage for nurses in Brazil, participating in debates on the incorporation of medicines, and improving the qualification of expenditures.

Although these advances indicate greater maturity on the part of DESID, caution is needed when stating that the department has established itself as a strategic player in the SUS. The documents analyzed show a trajectory of technical strengthening and relevant normative production, but do not clearly demonstrate its centrality in broader decision-making processes in national health policy. Thus, the analysis revealed that, despite limitations, DESID plays a vital role in coordinating health economics, budget planning, and political priorities in Brazil, highlighting its potential as a government actor in health economics.

This study's primary strength lies in its systematic reconstruction of the DESID's institutional trajectory over two decades. By analyzing normative frameworks, management instruments, and officially consolidated policy outputs, the research provides a structured historical understanding of the department's role in the SUS. This methodological choice allowed for the identification of institutional shifts and strategic priorities that have shaped the field of health economics in Brazil.

However, certain limitations must be acknowledged. While the documentary corpus provides a formal record of the state's action, it does not capture the full range of political actors, decision-making processes, or power dynamics underlying institutional changes. Consequently, the study does not permit systematic impact assessments or causal attribution regarding policy outcomes. Furthermore, although financial systems such as SIOPS and BPS are central to the agenda, this research did not aim to estimate cost-benefit ratios or economic impacts of specific interventions. Future studies could address these gaps by incorporating methodological triangulation, such as interviews with key actors and quantitative econometric analyses, to further evaluate the effectiveness and sustainability of health economics as a strategic field in universal health systems.

5. Conclusion

The historical analysis of the DESID from 2003 to 2023 demonstrated a robust process of institutionalization within the Brazilian Ministry of Health. This trajectory was marked by the creation of essential management tools, regulatory frameworks, and information systems that significantly enhanced transparency, efficiency, and equity in public health financing. The evolution from a technical area to a strategic department reflects the growing importance of economic evidence in supporting the sustainability of the SUS.

Despite these advances, significant challenges persist. The scarcity of specialized human resources at subnational levels and the lack of a unified National Health Economics Policy limit the full integration of economic analysis into the decision-making process. Furthermore, the study highlights that while DESID has strengthened its technical capacity, its centrality in broader national health policy decisions remains a goal to be fully achieved.

In theory, this research contributes to the understanding of how technical networks and political entrepreneurs consolidate strategic areas within universal health systems. In practice, it provides a roadmap for managers by identifying the need for ongoing technical training and improved intersectoral coordination. Future research should expand this institutional analysis through methodological triangulation, including interviews with key actors and quantitative impact assessments of specific health economics instruments.

Finally, the recent transition to the DESID and the creation of the Health Economics and Development Network (Rede Ecos) signal a promising shift toward a more decentralized and robust governance ecosystem. Ensuring the political and financial sustainability of these initiatives is crucial to health economics continuing to fulfill its role as a pillar of the SUS.

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Conflict of interest

The authors declare they have no competing interests.

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